L. R. BLACKMER,
Late Sec'y and Treas.
St. Louis Stoneware Co.

L. W. POST,
Late Sec'y and Treas.
H M. Thompson Pottery Co

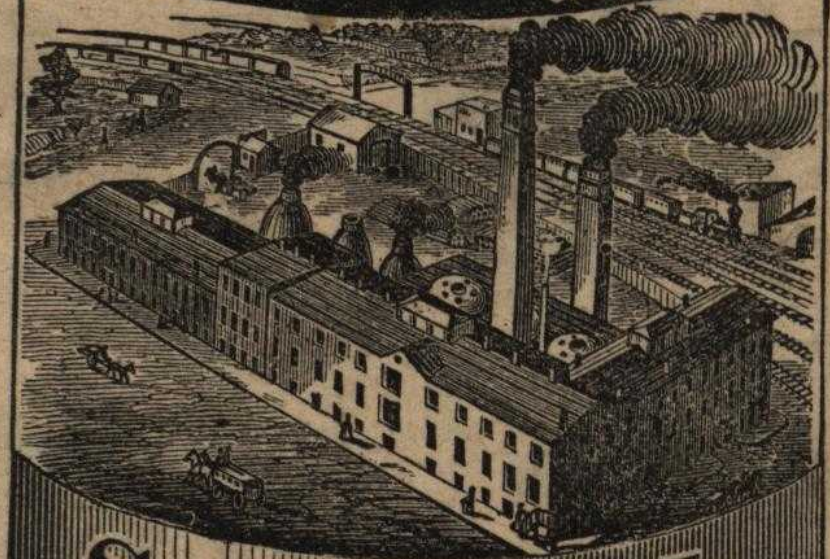
BLACKMER & POST.

SOLE AGENTS

SAINT LOUIS SEWER PIPE CO.

I. L. DOWNS, PRESIDENT

W. S. HALLIWELL, SEC'Y. & TREAS.



St. Louis Mo.

OFFICE, 907 PINE STREET,

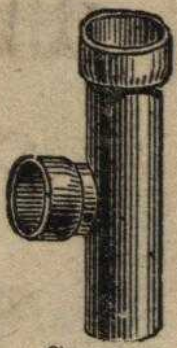
FORMERLY

H. M. THOMPSON POTTERY CO.

ILLUSTRATION OF CONNECTIONS.

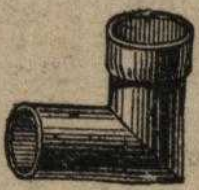
Straight Pipe.

Slant Junction.



Square Junction.

Curve.



Elbow.

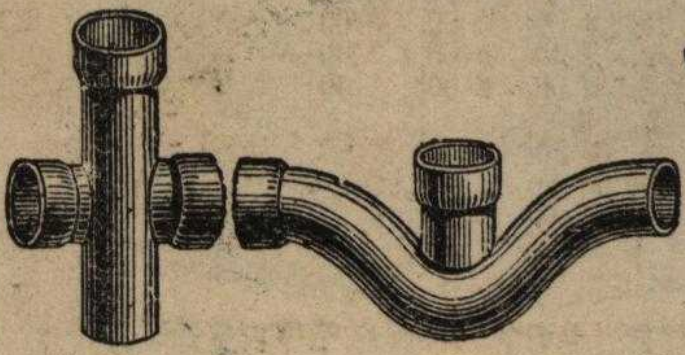
Slant

Regulation Curve.

P. Trap.

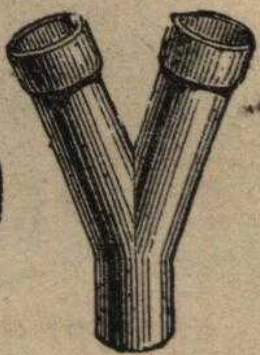
Decreaser.

Increaser.



Double Junction.

Stench Trap.



Breeches.

PRICE LIST

—OF—

EXTRA THICK, GLAZED and VITRIFIED

SOCKET SEWER PIPE.

—(o)—

ST. LOUIS STANDARD.

Extract from specifications of St. Louis District Sewer Contracts: "The thickness of six inch pipes shall be not less than three-quarters of an inch; of twelve inch pipes not less than one and one-eighth inches; of fifteen inch pipes not less than one and one-quarter inches; and of eighteen inch pipes not less than one and one-half inches."

Inside Diameter.	Straight Pipe and Open Gutters per foot.	Curves and Elbows, each.	Junctions, each.	Traps, each.	Double Junctions and Breeches.	Increasers, Decreasers and Slants.	Weight per foot.	Area in inches.
in.							lbs.	
3	$ 15	$ 50	$ 60	$1 70	$ 90	$ 45	6	7
4	20	60	80	2 10	1 20	60	9	12
5	25	75	1 00	2 50	1 50	75	12	20
6	30	1 00	1 20	2 90	1 80	90	15	28
8	40	1 50	1 60	4 00	2 40	1 20	25	50
9	50	1 75	2 00	5 00	3 00	1 50	30	64
10	60	2 10	2 40	6 00	3 60	1 80	35	78
12	75	2 75	3 00	8 50	4 50	2 25	45	113
15	1 00	3 75	4 00	.....	.....	3 00	70	177
18	1 50	4 75	6 00	.....	.....	4 50	100	254
24	2 50	8 00	10 00	.....	.....	.....	140	452
30	4 00	12 00	16 00	.....	.....	.....	180	706

☞24 and 30 inch pipe not governed by the usual discounts.

Price of 1 foot pieces, with Sockets, same as for 2 feet of straight Pipe.

We desire to call your attention to the following statement of

FACTS.

Twenty years ago our Factory was the only one making sewer pipe in this section of the country. Since that time we have been constantly manufacturing, availing ourselves, at all times, of the advantages of improved machinery, and steadily improving in the quality of our wares; and for many years our pipe has been pronounced by manufacturers, city authorities, dealers and consumers alike,

THE BEST IN THE MARKET.

Our pipe is made only of the best selected clay, is uniformly well glazed, thoroughly vitrified, smooth and perfect in shape; in all cases passing our rigid City Inspection without question, while the pipe of other manufacturers has been often rejected. In verification of the above we refer below to a few well-known and responsible persons, whose extensive experience with sewer pipe entitles their opinion to consideration

Col. HENRY FLAD, President Board of Public Improvements.

ROBERT MOORE, Sewer Commissioner.

WILLIAM WISE, Assistant Sewer Commissioner.

SKRAINKA & VIETHS, City Contractors, 6th and Locust Streets.

BAMBRICK & MORAGHAN, City Contractors, Tayon Av. and P. R. R.

GOTTLIEB EYERMAN, City Contractor, Iowa Av. and Pestalozzi Street.

JOHN DEVLIN, City Contractor, 1922 Wash Street.

AUGUST HEMAN, City Contractor, Clay Av. and N. Market Street.

THOMAS C. LUNEY, City Contractor, 203 S. 13th Street.

ROBERT SHEEHAN, City Contractor, 19th and Dodier Streets.

GRAHAM & PETERS, Plumbers, 621 Locust Street.

"HEALTH IS BETTER THAN WEALTH."

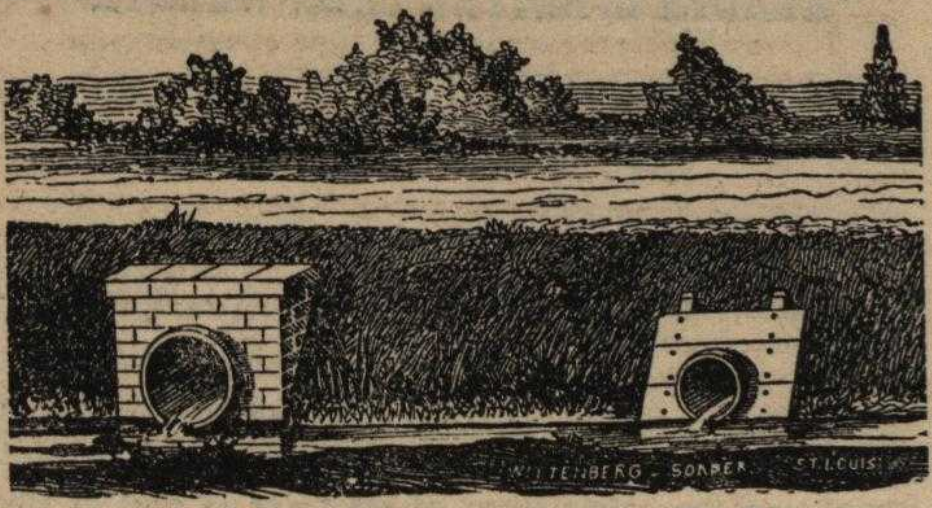
SEWERAGE.

City and House Drainage a Vital Necessity.

It is the united testimony of those whose fitness and opportunities entitle their opinion to careful consideration, that ***want of sewerage*** is one of the most prolific causes of those febrile maladies with which cities and other places are occasionally visited, as in Chicago, during the five or six years before 1855—five years of cholera and one year of dysentery—and the yellow fever scourge at Shreveport, La., and Memphis, Tenn., in 1873, and throughout the entire South last year (1878); the last visitation of the disease being the most malignant ever known, threatening to depopulate nearly all the principal cities in the South, and the cause traced by eminent physicians directly to the ***want of sewerage***. Observation has shown conclusively, ***greater mortality*** in localities naturally more healthful ***without*** sewerage, than in others naturally less healthful, which are sewered. Dr. John H. Roach, of Chicago, is reported as saying: "It is plain that the number of deaths in a ward ***is regulated by the number of feet of sewers it contains to each individual in it***, no matter what other conditions obtain with regard to population." Authorities show conclusively the necessity of proper house drainage.

For sewerage and house draining purposes, no material has yet been found ***equal*** to ***Vitrified Salt-glazed Stoneware Pipes***. It and other materials have been tested thoroughly, and at a great expense, but the ***Vitrified, Salt-glazed, Stoneware Pipe alone***, has been found entirely reliable. It has strength and durability, and no acid has been found to affect it.

RAILROAD & WAGON ROAD CULVERTS.



No. 1. No. 2.

The rapidly increasing demand for our sewer pipe for RAILROAD and WAGON ROAD CULVERTS has encouraged us to give special attention to the manufacture of pipe for this use, and after a careful study of the conditions to be met, and considerable outlay of time and money, we have produced a grade of quality in sewer pipe for *Culverts* unequaled in the West. The first requsite is *strength* to resist the crushing weight of heavily loaded wagons or freight trains. This has been secured by changing our dies, making the pipes EXTRA THICK, so that they *will absolutely* endure the greatest amount of vertical pressure that this use entails, and which the pipes of ordinary thickness under the same circumstances are not certain to do.

These pipes are made of carefully selected clay, burned to a body of stone, perfectly glazed and true in shape, and entirely free from imperfections of any kind, and when once well laid are a permanent and sightly improvement.

The construction of a Pipe Culvert is a matter so simple that but few directions are necessary. The main thing is to secure a solid bed for the pipes. After bringing the bottom of the trench to the proper grade, this result may be obtained by cutting little depressions to fit the sockets, taking care to see that each section of pipe rests its entire length uniformly in its bed. Where the ground is soft or sandy, the same effect may be produced by carefully pressing and ramming the loose earth under and around the lower surface of the pipes.

In placing the pipes, commence at the outlet of the culvert with the sockets of the pipes facing up grade, and securely settle each joint in position before placing another. When the pipes are all laid, if the top of the sockets is less than one foot below the road surface, cover the pipes with hard pressed earth to a unifrom depth of a few inches, then place a few boards lengthwise over the pipes and grade up to the level of the road. The end pipes may be protected by a cheap abutment of wood, made by setting two posts on either side of the pipe deep enough to be below the influence of frost, and nailing on boards nicely fitted around the end of the pipe, as

shown in Cut No. 2, or by a more lasting and necessarily more expensive abutment of stone or brick, as shown in Cut No. 1.

The size of pipe required may be approximately estimated by a simple calculation and reference to the table below. In this section of the country, the amount of rainfall during the heaviest storms rarely amounts to one inch in depth in one hour. One acre of water, one inch deep, measures 22,633 gallons, which is the amount of water which *may* fall on one acre in one hour, and one-sixtieth part of this, or 377 gallons, is the quantity which may fall on the same area in one minute; but, owing to various obstructions, not more than three fourths of this water would reach the culvert the same hour; therefore, any pipe of sufficient size and fall to pass three-fourths of 377 gallons, or say 300 gallons in a minute, is large enough to drain one acre in the heaviest floods. Therefore, to find the size of pipe required for any number of acres, multiply the number of acres by 300 and, then find in the table below, in the column indicating the fall of the proposed culvert, the number equal to or next larger than this product, and the figures in the extreme left hand column will indicate the proper size of pipe.

CARRYING CAPACITY OF PIPE IN GALLONS PER MINUTE.

Size of Pipe.	1 in. fall per 100 ft.	2 in. fall per 100 ft.	3 in. fall per 100 ft.	6 in. fall per 100 ft.	9 in. fall per 100 ft.	1 foot fall per 100 ft.	2 feet fall per 100 ft.	3 feet fall per 100 ft.
3 inch.	13	19	23	35	40	46	64	79
4 "	27	38	47	66	81	93	131	163
6 "	75	105	129	183	224	258	364	450
8 "	153	216	265	375	460	529	750	923
9 "	205	290	355	503	617	711	1006	1240
10 "	267	378	463	655	803	926	1310	1613
12 "	422	596	730	1033	1273	1468	2076	2554
15 "	740	1021	1282	1818	2224	2464	3617	4467
18 "	1168	1651	2022	2860	3508	4045	5604	7047
24 "	2396	3387	4152	5871	7202	8303	11744	14466
30 "	4187	5920	7252	10257	12580	14504	20516	25277

County Supervisors or Road Overseers, who contemplate improvements of this kind, will be cheerfully furnished with any information which our long experience and acquaintance with the obliging officials in our City Sewer Department enables us to give. We can also refer them to parties who are using our sewer pipes for culverts with the greatest success, and who will no doubt be glad to give others the benefit of their experience.

N. B. Although the changes and improvements we have recently made in our culvert pipes has involved heavy expenses, our facilities for manufacturing and shipping are such that we continue to sell at the same prices we before received, and at which other manufacturers are still selling the pipe of ordinary thickness.

TO PLANTERS.

We desire to call the attention of owners and managers of cotton, sugar and rice plantations to the rapidly increasing use of our sewer pipes for drainage purposes in place of open drains, which are still so common on many plantations in the South. The first cost of sewer pipes, of course, is greater than making the drains and bridges, but when it is considered that the drains must necessarily be cleaned often and the bridges will wear out, that the area now given to drains might, by the use of sewer pipes, be cultivated and made to yield a good crop, and that the pipes, being as indestructable as stone, will, when once well laid, last forever, without attention, adding to the money value of the property, besides the great improvement in the appearance of the fields, by doing away with the open drains, it is clearly a good investment and certain to return a handsome profit. Many planters have already realized great benefit from it, commencing by laying a few hundred feet, and each year after a few hundred feet more. In this way the expense is not great, as, after the first year the matter is no longer an experiment but an assured fact, the increased crops helping to pay for the improvements. It is a gratifying fact that ***every planter who has once used our pipe has ordered again***, while we have yet to learn of the first instance where the use of sewer pipes for this purpose was unsatisfactory.

All necessary directions for laying the pipes and for ascertaining the size of pipe required for draining a given area will be found on pages 6 and 7 of this circular, and on page 3 our price list of all sizes from 3 to 30 inches in diameter. From these prices we will discount liberally, and to parties making their first trial, we will make special inducements.

We shall be glad to correspond with parties contemplating improvements of this kind, and can refer them to several prominent planters who have used and are still using our pipes with the greatest success

WELL TUBING.

Stoneware Pipes have come into very general use for tubing bored wells, and are the cleanest and most durable material known for that purpose.

For this use, the sections are made without sockets so as to fit the hole more closely, but the regular socket joint makes a more solid job.

PRICE LIST

—OF—

WELL TUBING.

DIAMETER.						Price per ft.	Weight per ft. lbs.
6	inch,	inside—	8	inch,	outside	$0 30	15
8	"	"	10	"	"	0 40	20
9	"	"	11	"	"	0 50	25
10	"	"	12	"	"	0 60	30
12	"	"	14	"	"	0 75	40
15	"	"	18	"	"	1 00	60
18	"	"	21	"	"	1 50	75
24	"	"	27	"	"	2 50	120

FARM DRAIN TILE.

For Underdraining Wet and Soggy Soils.

Within a few years past the value of many farms in the West has been increased many fold by the judicious and generous use of Drain Tile. The farmer who now ignores this invaluable assistant is behind the times. He is generally poor, his neighbors harvesting better crops and underselling him in every market. By the use of Drain Tile, swamps and marshes that for years have held a greater or less amount of dirty, stagnant water, filling the air with their poisonous vapors, may be made fruitful and profitable fields. It is claimed that the experience of our most practical and successful farmers shows that the increase of crops by underdraining will, in three years, cover all the expenses of such improvement, and often in one year, besides the sanitary effect on the health of the neighborhood by removing stagnant pools and their miasmatic effluvia.

The demand for these Tiles has been so great that it has been difficult for the legitimate manufacturers of Standard Tile to meet it, and there has been thrown upon the market a vast amount of very inferior, in some cases worthless, material which has been sold as good tile. A word or two as to the qualities of good Tile will enable farmers to discriminate between the inferior and the best, and save them much annoyance and expense.

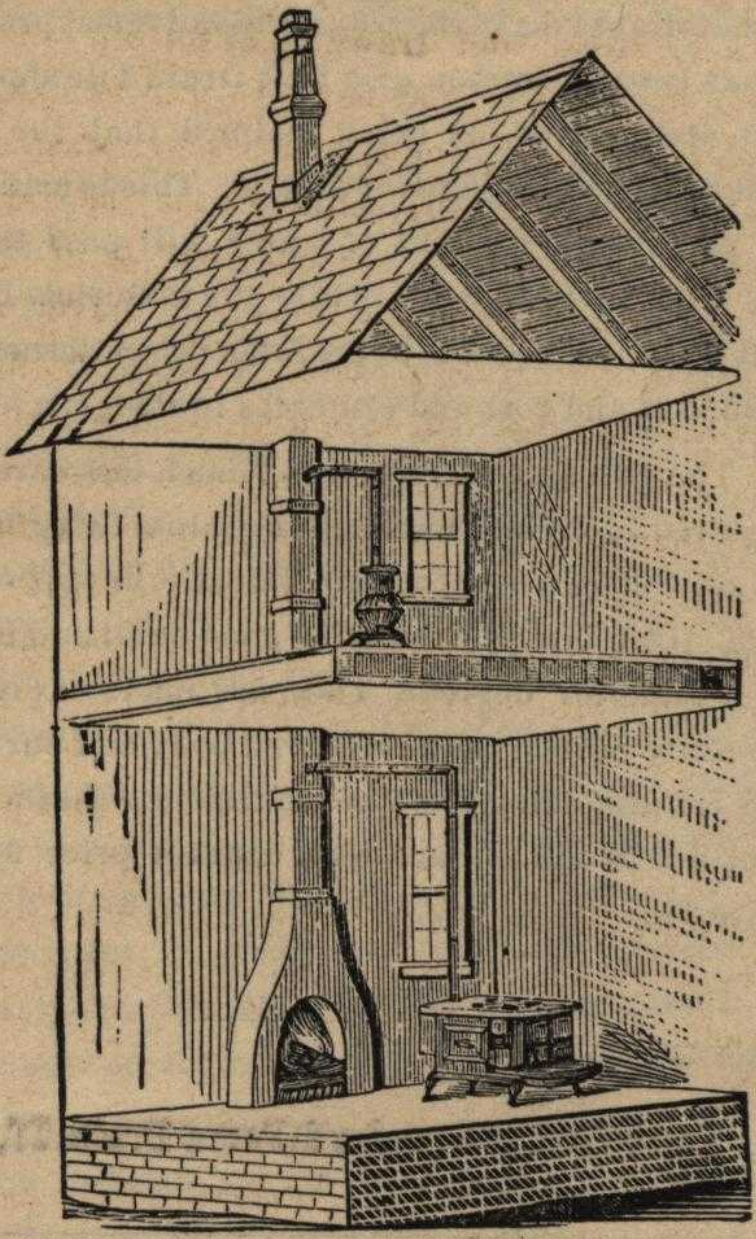
Drain Tiles require smoothness of inner surface, to allow the water to pass unimpeded, and strength of material to make them durable and resist pressure. It has been a common idea that Drain Tile should be soft and porous, it being claimed that the water soaks through the pores of the tile. This is a mistake, no perceptible amount of water will pass through the tiles in this way, while the material, being a soft body, soon yields to the influence of the moisture around it and rots and crumbles in the ground.

The tile should be round, much less care being required in laying them and the joints being less apt to get out of position than the tile having one flat side. Our Tile possesses the good qualities named, in a superior degree. They are made of pipe clay carefully burned to the required body and our facilities for producing them are so superior that we shall continue to sell at the lowest market price for first class Tile.

Price List of Standard Farm Drain Tile.

Size inside Diameter.	Price per 1000 ft.	Branches, each.			No. of feet to carload
		Single.	Double	Curves.	
1½ inch ..	$15 00	.....	.....	.....	8,000
2 " ..	20 00	$0 20	$0 30	$0 20	7,500
3 " ..	30 00	0 30	0 50	0 30	6,000
4 " ...	40 00	0 35	0 60	0 35	3,500
6 " ..	70 00	0 50	0 75	0 40	1,700
8 " ..	100 00	1 00	1 50	0 75	1,000

PATENT CHIMNEYS—without Brick.



Showing Chimney, etc., in place.

DIRECTIONS—Send a penciling of how you want your chimney. Give size of and where you want stove pipe hole, length of chimney and kind of chimney top, giving the number on cuts. Say whether you want stove pipe hole on 8½ inch or on 13 inch side of chimney.

The cut on the opposite page shows a house with one of our chimneys set up—a fire-place made of brick or stone, and drawn up at the top so as to fit size of flue wanted, may be used—or by using a short plank or board, resting on two brackets fastened to side walls of the room, a chimney may be started at any point in the first or second story; or, if desired, they may be suspended by irons from the ceiling.

Where the chimney passes through the floor or partitions, or the roof, it is well to leave a space of two inches all around the same, as security against more than ordinary fires. These spaces may be filled in with brick or mortar, or covered with some metallic substance, as shown around the chimney, where it comes through the roof.

When bricks are scarce or high priced, these take their place at small expense, being light and durable, neat and clean, and perfectly safe.

They were first invented by Mr. Thompson, and have now been in use over nine years, giving perfect satisfaction.

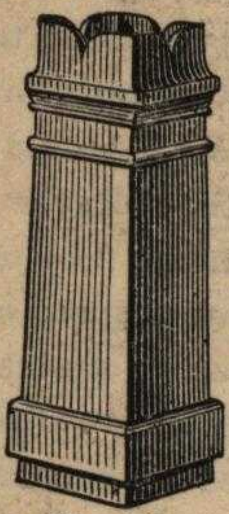
PRICE LIST OF PATENT CHIMNEY.

Size	Weight.	Price per foot.
8½x8½ in. square....per foot,	25 lbs	.....50c.
8½x13 " " .... "	35 "	.....70c.
6 in. round..... "	15 "	.....30c.
8 " " ..... "	20 "	....40c.
6 " Bottoms		$1.20
8 " "		1.80
6 " Drop Bottoms		1.60
8 " "		2.40

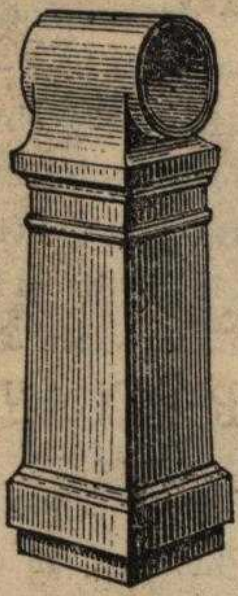
Pipe Holes, 25c. net for each hole

For Chimney Tops to fit Patent Chimneys, refer to cuts.

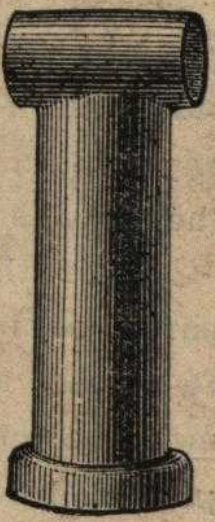
CHIMNEY TOPS.



No. 2.



No. 2 Arched.



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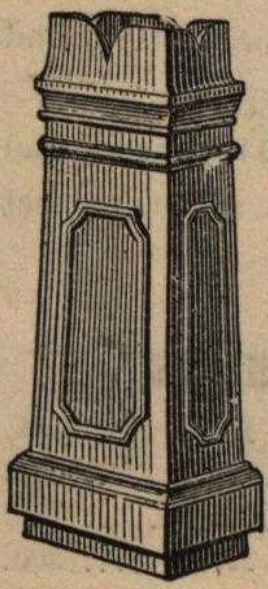
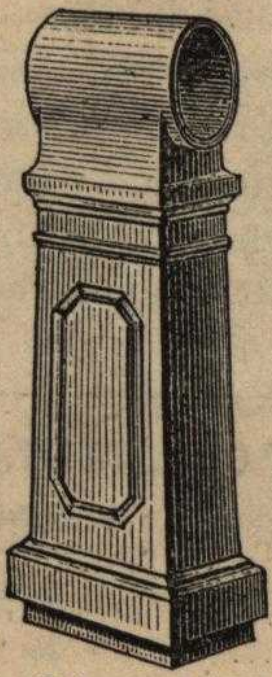
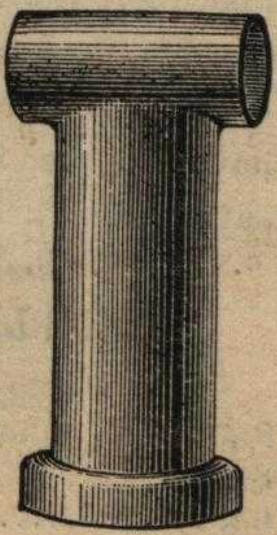


No. 3.



No. 3 Arched.



No. 5.

PRICE LIST OF CHIMNEY TOPS.

No.	Size.	Height.		Price
2.	8½x8½ in. sq.	32 in.	Hand made, plain.	$2.50
2.	8½x8½ "	38 "	" arched,	3.00
3.	8½x13 "	36 "	" plain,	3.50
3.	8½x13 "	40 "	" arched,	4.00
4.	6 in. round, with arched top,		30 in. high,	1.50
5.	8 "	" "	30 "	2.00

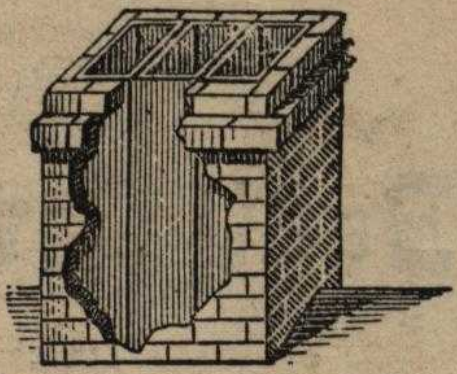
FLUE LININGS.

MADE OF FIRE-CLAY.

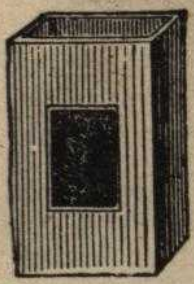
Glazed

OR

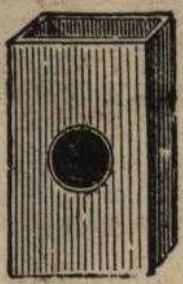
Unglazed



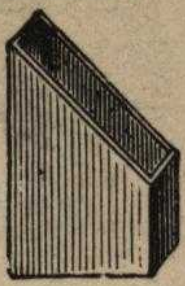
NO RUST OR DECAY TO THEM.



Register Opening.



Pipe Hole.



Angle.

Size.			Price.		Weight.
4¼ inch by 8¼ inch square			.25 cts.	per foot.	.12 lbs.
4½ "	13	"	.30 "	"	.15 "
8½ "	8¼	"	.40 "	"	.20 "
8½ "	13	"	.50 "	"	.30 "
8¼ "	17	"	.70 "	"	.35 "
13 "	18	"	1 00	"	.60 "
9 inch round		.....	35 cts.	"	.25 "
12 "		.....	50 "	"	.40 "

Pipe Holes, 25 cts. net for each hole.

Very few first-class houses, either public or private, are now built without fire-clay flue-linings, either round or rectangular for each smoke flue in the chimneys, thus effectually protecting the building against fires, which so frequently originate from defective flues.

These flue-linings are also very generally used for hot-air flues instead of tin, for conducting the heat from furnaces to the several rooms in the house being much superior to tin for this purpose, as they are not liable to rust out or communicate fire to the contiguous wood work through which they pass.

All the prominent Insurance Companies recognize the additional safety against fire secured by the use of these flue-linings, by insuring buildings thus protected at cheaper rates than they otherwise would.

THE FIRST PREMIUM

—FOR THE—

Best Sewer Pipe

WAS AWARDED TO US

OVER ALL COMPETITORS

—BY THE—

St Louis Agricultural and Mechanical Association,

AT THEIR ANNUAL FAIR and EXPOSITION

in 1878.

ADDRESS:

BLACKMER & POST,

907 PINE ST.,

ST. LOUIS.

Represented by.....